

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/000293

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7 B23Q 3/155, B23Q 3/157, B23B 31/26

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 B23Q, B23B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
KR,JP; IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,613,929 A1(Hurco Companies, Inc.,) 25.03.1997 See the whole document	1-5
A	US 5,039,261 A1(Brother Kogyo Kabushiki Kaisha) 13.08.1991 See the whole document	1-5
A	JP 60-131147 A(Washiyama Tomyoshi) 12.07.1985 See the whole document	1-5
A	JP 61-109647 A(Toyoda Mach. Works Ltd.) 28.05.1986 See the whole document	1-5

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"G" document member of the same patent family

Date of the actual completion of the international search

17 JUNE 2004 (17.06.2004)

Date of mailing of the international search report

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Name and mailing address of the ISA/KR

Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

KIM, Chun Hee

Telephone No. 82-42-481-5417



**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/KR2004/000293

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5,613,929 A	25.03.1997	JP 11504575 T2	27.04.1990
		CA 2223270 A4	19.12.1996
		EP 836541 A4	18.11.1998
		WO 9540471 A1	19.12.1996
		AU 5886696 A1	30.12.1996
US 5,039,261 A	13.08.1991	JP 2311206 A2	26.12.1990
		OE 4016654 A1	29.11.1990
JP 60-131147 A	12.07.1985	JP 2058053 B4	06.12.1990
JP 61-109647 A	28.05.1986	JP 5079459 B4	02.11.1993